

Title (en)

Electrophotographic photosensitive drum, process cartridge, and electrophotographic image forming apparatus

Title (de)

Elektrophotographische photoempfindliche Trommel, Arbeitseinheit und elektrophotographisches Bilderzeugungsgerät

Title (fr)

Tambour électrophotographique photosensible, unité de traitement et appareil électrophotographique de formation d'images

Publication

EP 1628165 A2 20060222 (EN)

Application

EP 05009735 A 20050503

Priority

- JP 2004140695 A 20040511
- JP 2004283318 A 20040929

Abstract (en)

The main assembly of an electrophotographic image forming apparatus includes a motor, a main assembly gear (71) for transmitting a driving force from the motor via a non-circular twisted hole (71a) having a section with a plurality of corner portions provided at a central portion of the main assembly gear, the non-circular twisted hole being rotatable integrally with the main assembly gear. An electrophotographic photosensitive drum of a process cartridge detachably mountable to the main assembly includes a non-circular twisted projection (61b) provided on its one longitudinal end and having a section with a plurality of corner portions (61b1), which are engageable with the twisted hole to receive the driving force when mounted to the main assembly; a recess (65) formed in the central portion of the projection and having a bottom portion (65a) and a side surface portion (65b). When the projection receives a pulling force toward the twisted hole by rotation of the main assembly gear both the bottom portion and the side surface portion is contacted to a spherical surface portion (70a) provided at a central portion of the hole (65a1).

IPC 8 full level

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CPC (source: EP KR US)

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Citation (applicant)

- JP 2003005475 A 20030108 - CANON KK
- EP 1195651 A2 20020410 - CANON KK [JP]

Cited by

EP3079018A1; US8724109B2; WO2008117878A1; US9772602B2; US10209670B2; US10429794B2; US10845756B2; US11156956B2; US9703257B2; US9817333B2; US9836015B2; US9841724B2; US9851685B2; US9851688B2; US9857766B2; US9886002B2; US9939776B2; US10520887B2; US10620582B2; US10712709B2; US10712710B2; US10788789B2; US10788790B2; US10795312B2; US10816931B2; US11204584B2; US11675308B2; US9678471B2; US9733614B2; US9746826B2; US9836021B2; US9841728B2; US9841727B2; US9841729B2; US9846408B2; US9857764B2; US9857765B2; US9864331B2; US9864333B2; US9869960B2; US9874854B2; US9874846B2; US10539924B2; US10539923B2; US10551793B2; US10585391B2; US10671018B2; US10877433B2; US11237517B2; US11720054B2; US10948871B2; US10955796B2; US11061366B2; US11061367B2; US11061364B2; US11061368B2; US11067947B2; US11067948B2; US11073790B2; US11073791B2; US11334023B2; US11435693B2; US11442404B2; US11442405B2; US11762330B2

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US 96005404 A 20041008; CN 200410090386 A 20041112; EP 05009735 A 20050503; JP 2004283318 A 20040929; KR 20050038652 A 20050510; US 61648606 A 20061227